STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

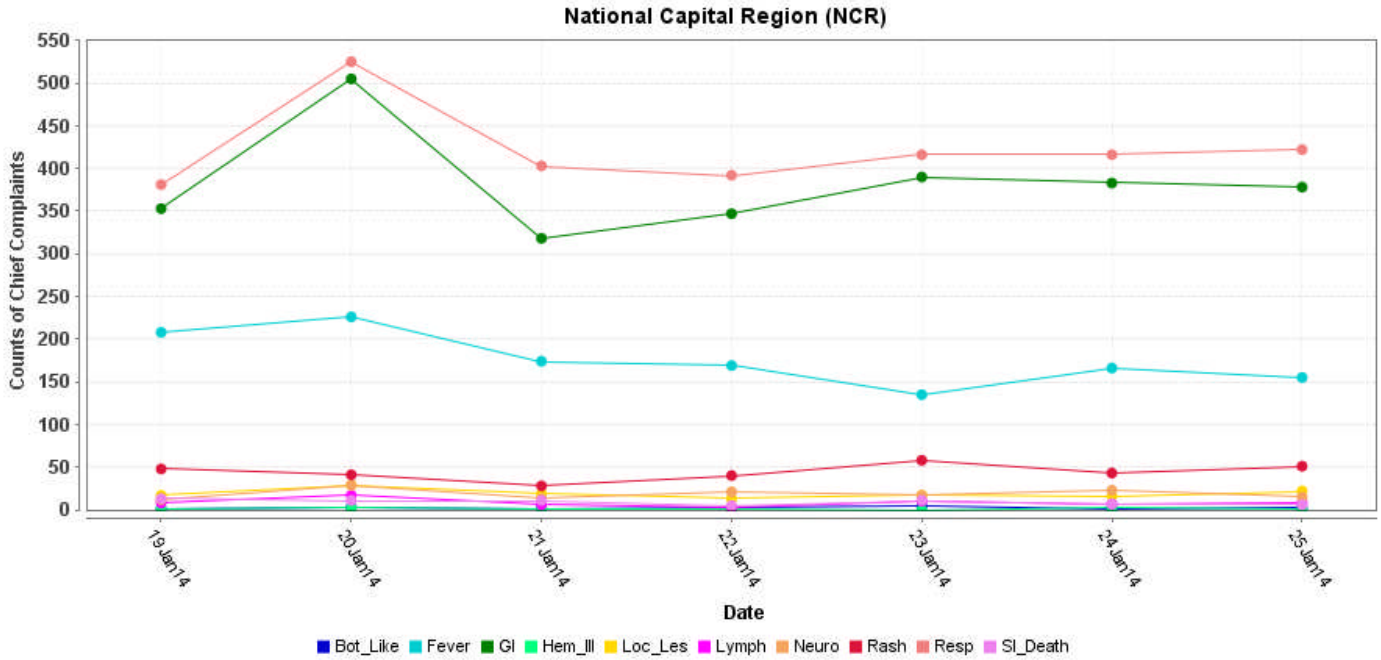
January 31, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:04
Reporting for the week ending 01/25/14 (MMWR Week #04)

CURRENT HOMELAND SECURITY THREAT LEVELS

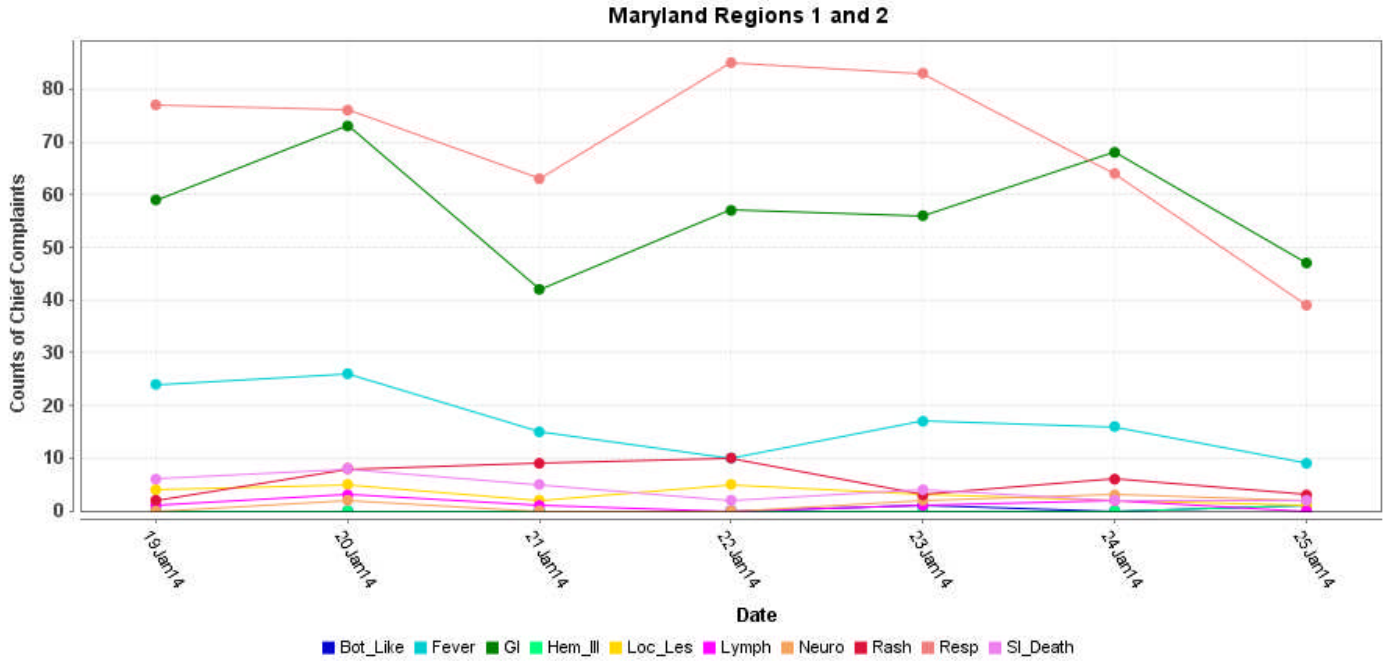
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

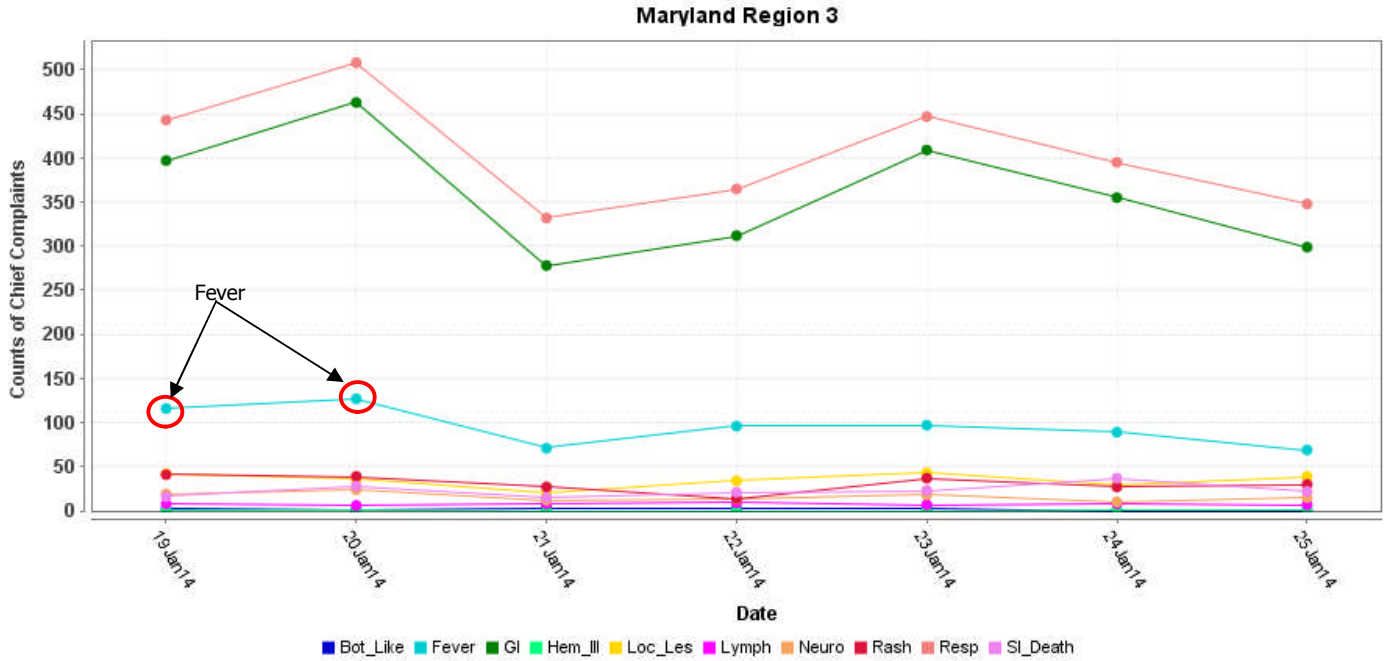


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

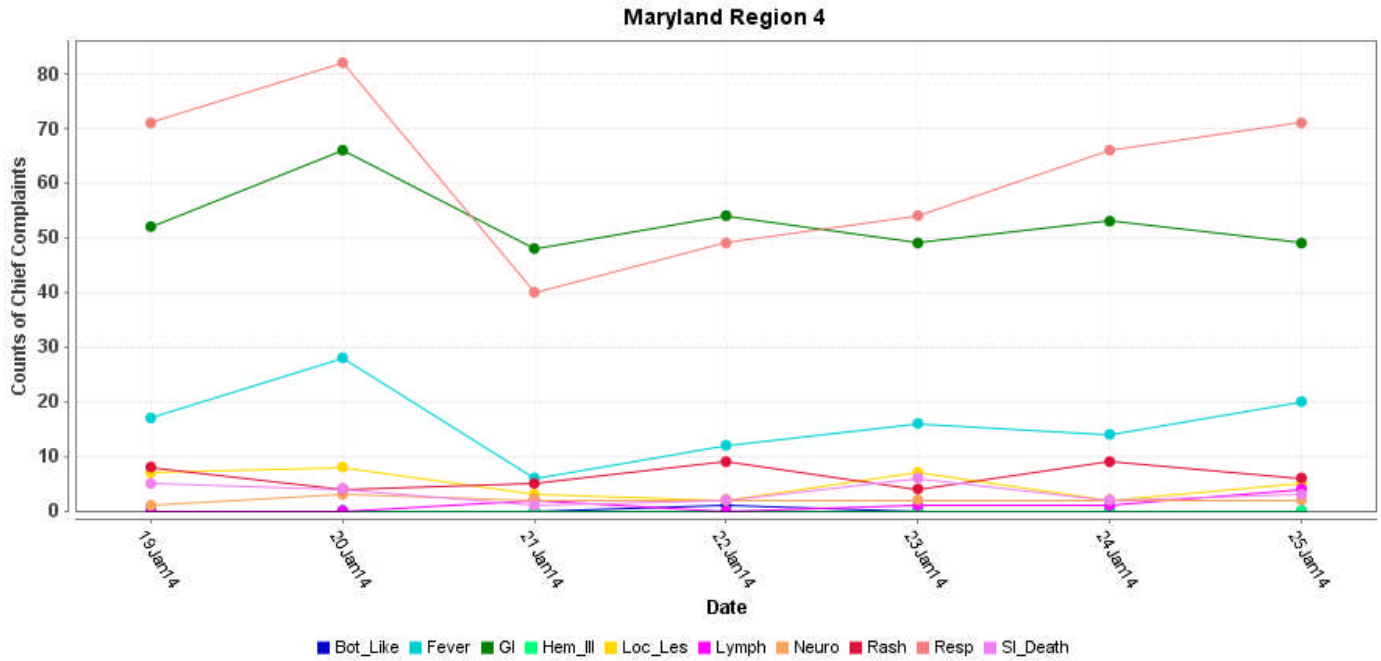
MARYLAND ESSENCE:



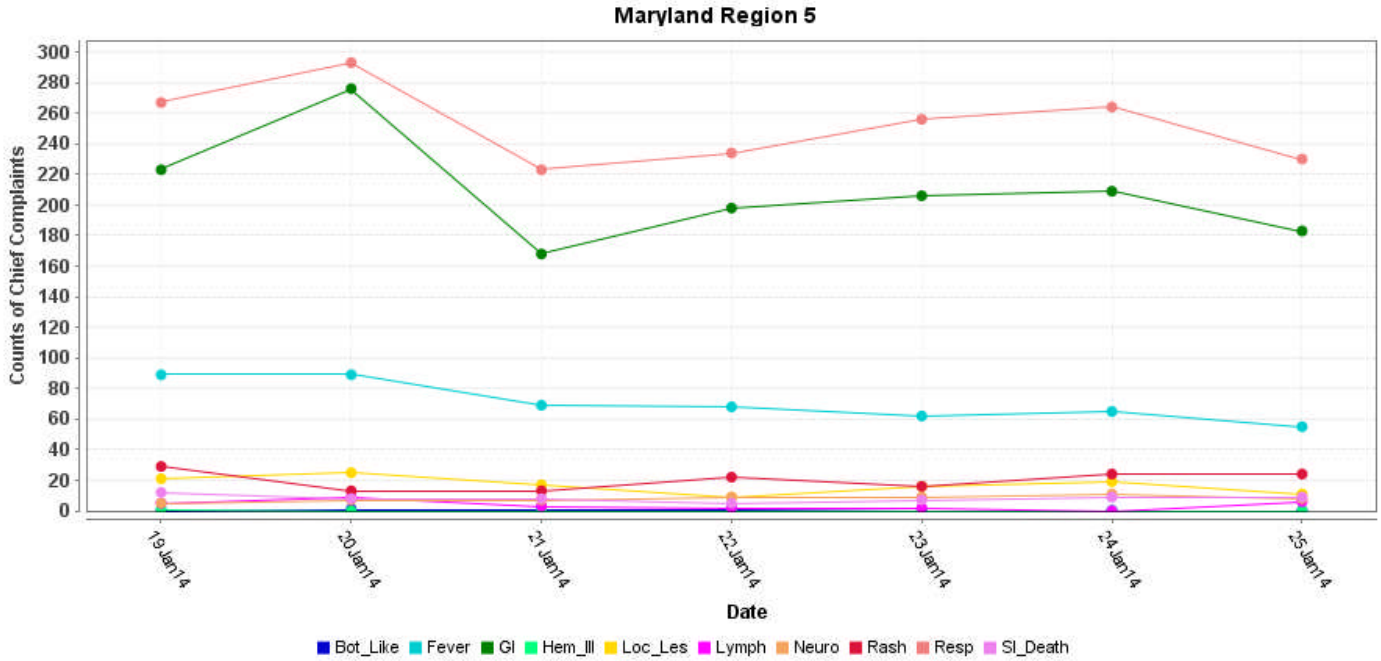
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



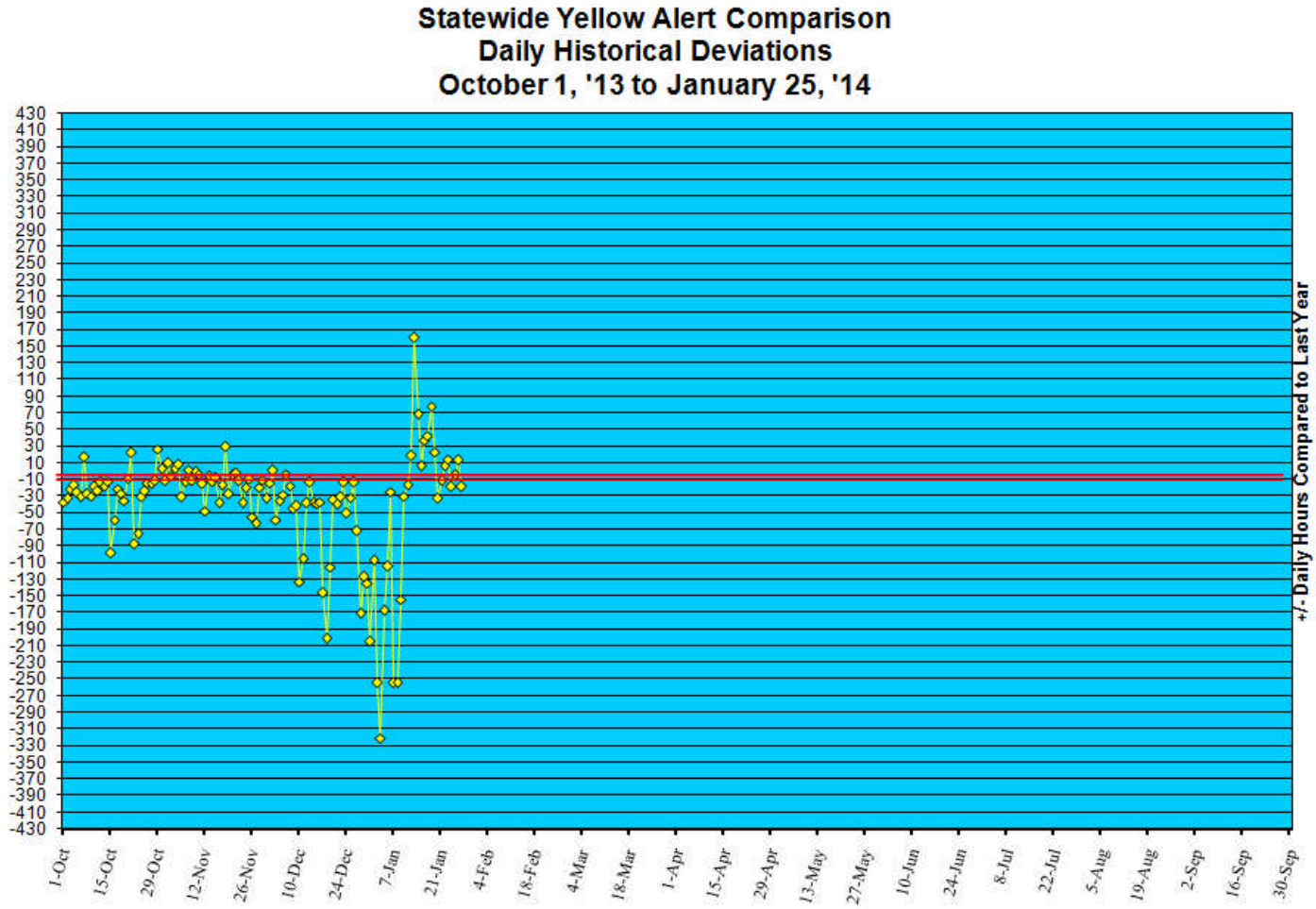
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (January 19 - January 25, 2014):	9	0
Prior week (January 12 - January 18, 2014):	8	0
Week#04, 2013 (January 20 – January 26, 2013):	7	0

5 outbreaks were reported to DHMH during MMWR Week 04 (January 19 - 25, 2014)

1 Gastroenteritis Outbreak
1 outbreak of GASTROENTERITIS in an Assisted Living Facility

1 Foodborne Outbreak
1 outbreak of SCOMBROID POISONING associated with a Catered Event

2 Respiratory Illness Outbreaks
1 outbreak of INFLUENZA in a Nursing Home
1 outbreak of ILI/PNEUMONIA in an Nursing Home

1 Rash Illness Outbreak
1 outbreak of FIFTH DISEASE associated with a Daycare Facility

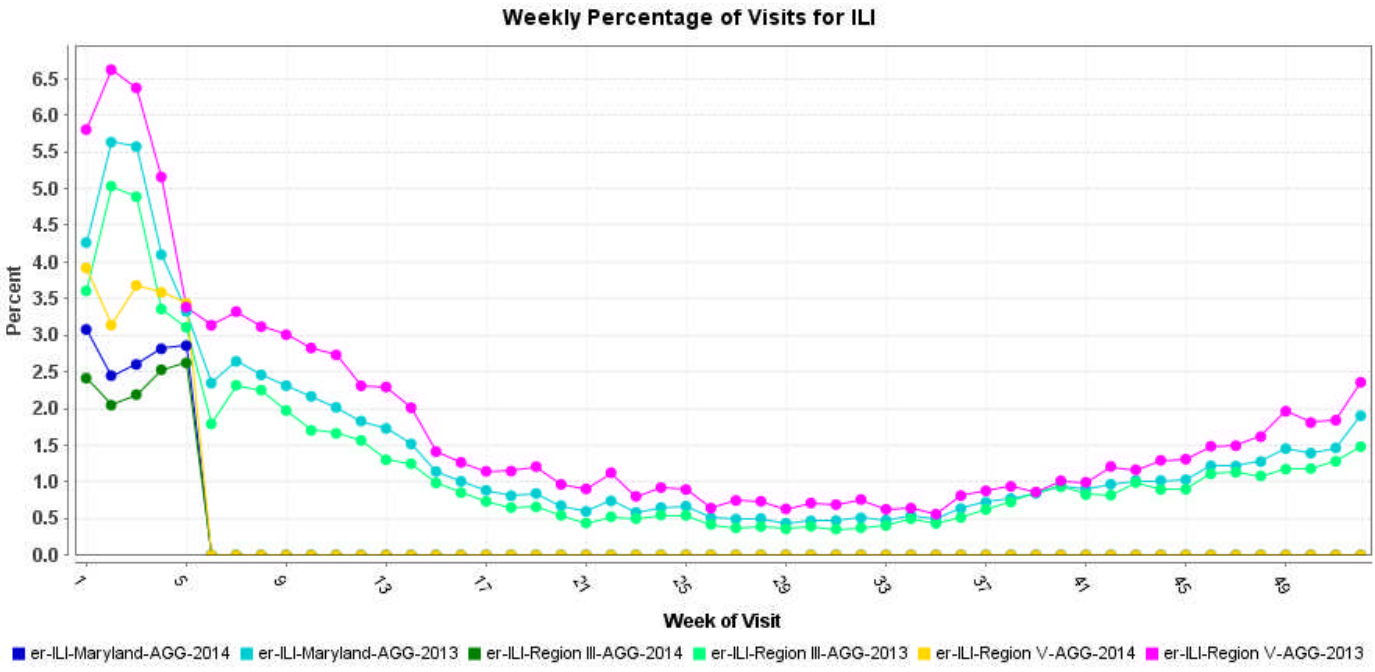
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 3 was: Widespread with Low Intensity

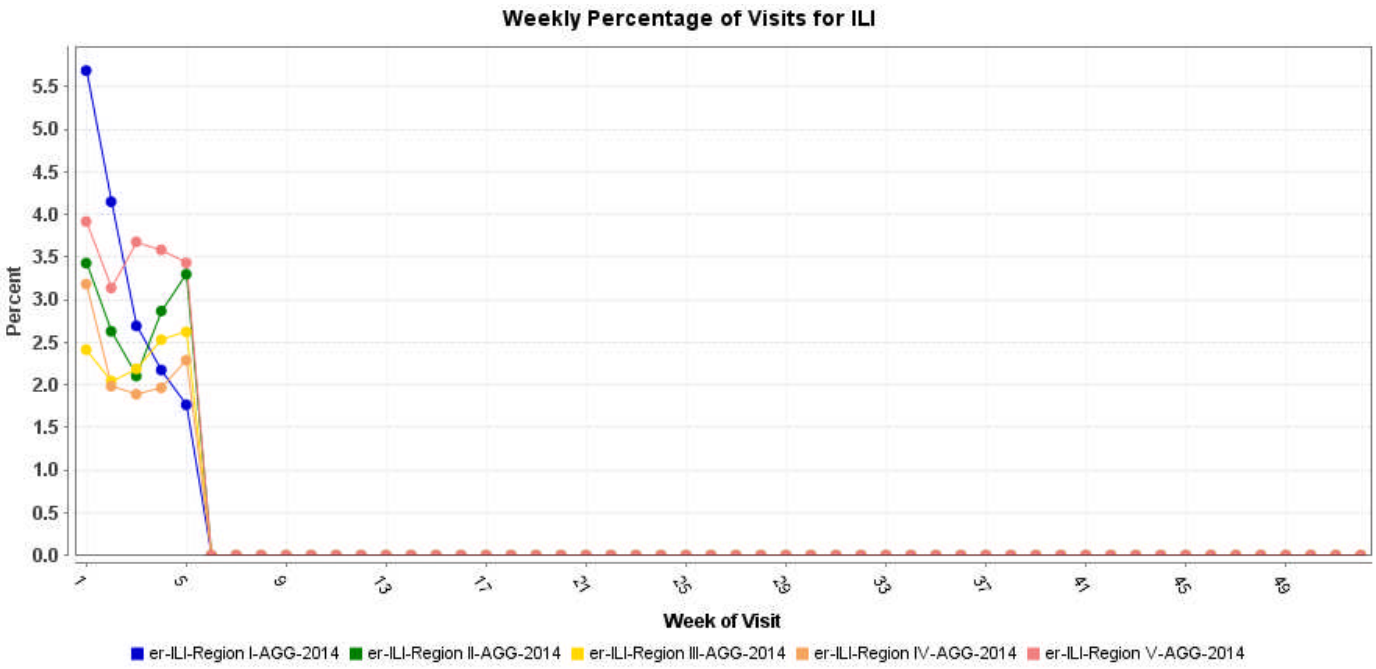
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



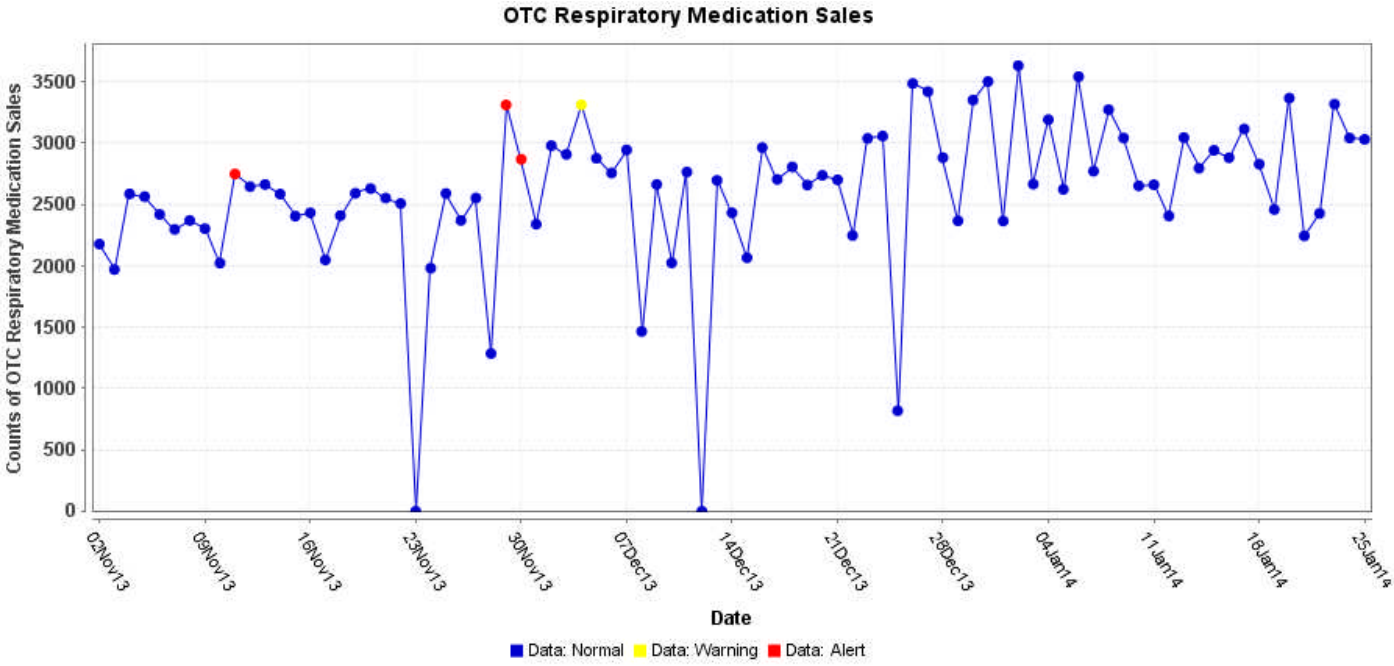
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of December 10, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 648, of which 384 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN (H7N9): A total of 10 human H7N9 bird flu cases were newly reported in China on Friday [24 Jan 2014], including 1 in Beijing, 1 in Guangdong Province, 1 in Fujian Province and 7 in Zhejiang Province, forcing cities in Zhejiang to close their live poultry markets. In the 1st case reported in the city this year [2014], a man in Beijing was confirmed to have contracted H7N9 on Thursday night [23 Jan 2014], according to the Chinese capital's disease control and prevention center. He is receiving treatment at Ditan Hospital. The center said the patient had bought pigeons and ate them before being admitted to the hospital. The health and family planning committee of south China's Guangdong Province likewise reported on Friday [24 Jan 2014] that a 34-year-old woman in Shenzhen City had contracted the virus. She is also in a critical condition. The health authorities in Guangdong's neighboring province of Fujian also announced that a 46-year-old female villager in Hui'an county was Friday confirmed to have been sicken by the H7N9 virus, bringing the total infections in the province to 8. The patient is under treatment at a local hospital and is in a critical condition. In east China's Zhejiang Province, 7 human H7N9 cases were reported on Friday [24 Jan 2014], bringing the total number of such cases to 44 in the province. All the newly reported cases, aged from 23 to 82, are in critical conditions, according to the provincial health authorities. To limit spreading of the virus, the Zhejiang provincial capital of Hangzhou called a halt to live poultry trading in urban areas on Friday. Events such as circuses involving live animals were also suspended, according to a circular released late on Thursday [23 Jan 2014]. Li Lanjuan, a leading researcher on bird flu at the Chinese Academy of Engineering, said the move to close poultry markets was necessary to help human beings avoid contact with infected live poultry. Many live poultry markets in cities of Jinhua, Ningbo and Shaoxing were also closed. In another development, scientists with the Institute of Microbiology of the Chinese Academy of Sciences said Friday [24 Jan 2014], based on their research results, that the possibility of human-to-human transmission of H7N9 virus is extremely slim. "H7N9 virus infects humans through [the] respiratory tract, so eating cooked poultry will not be [infective]," said Liu Yao, one of the scientists. Scientists said transportation of poultry plays an important role in helping the virus spread. They called for controlling the channel from poultry to human, and sterilizing live poultry markets.

NATIONAL DISEASE REPORTS*

BOTULISM (TEXAS): 21 January 2013, There were 2 cases of wound botulism in injection drug users in the Dallas/Fort Worth (TX) area. This is a life-threatening progressive disease. Symptoms can worsen to respiratory failure. Injection drug users need to know that wound botulism can start with symptoms of nausea, vomiting, blurred vision, dizziness, dysphagia, and shortness of breath. They must seek medical care promptly. Cases that are found will be reported to Texas Department of State Health Services. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case.

INTERNATIONAL DISEASE REPORTS*

LEPTOSPIROSIS (PHILIPPINES): 22 January 2014, Barangay health workers have distributed medicines for leptospirosis in different evacuation centers in Cagayan de Oro, but more may be needed, according to the Department of Health. Authorities expressed fear there may be a rise in leptospirosis cases in flood-affected areas, as some 9000 residents from Cagayan de Oro alone are affected by flooding. Meanwhile, thousands have fled to Butuan City after the Agusan River overflowed Tuesday [21 Jan 2014] due to 3 days of incessant rains spawned by Tropical Depression Agaton. Some 16 000 residents are now housed in different evacuation centers in Butuan City, with one classroom accommodating as much as 15 families or more than 20 individuals. Meanwhile, the Philippine Coast Guard conducted operations in Barangay Mahogany in Butuan City to rescue residents who have been trapped in the area for 2 days. Some residents, however, refused to leave their homes, reports said. Classes in all levels remain suspended in Butuan City, but work suspension has been lifted as floodwaters have started to abate. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (COLOMBIA): 21 January 2014, Authorities in the Choco [department] municipality of Litoral del San Juan, close to Buenaventura [Valle del Cauca department], warned of a possible new outbreak of cholera, which has already killed 3 children in the indigenous population of Pangala. According to the mayor of the town, Oscar Rosero, the 3 children who died of suspected cholera came from the Wounaan indigenous reserve. "We have sent a medical commission to determine the veracity of the information and, if necessary, we will declare a health emergency. There are also another 10 patients, both adults and children," Rosero said. He added that early reports indicate that the sick people presented with severe episodes of vomiting and diarrhea. The Pangala indigenous reserve, which suffered in the 1990s from an epidemic of cholera, is located 2 hours by boat from the urban center of Litoral del San Juan on the San Juan River. (Water Safety Threats listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (PANAMA): 19 January 2014, A little less than 2 months before [the celebration of] carnival, Herrera province Regional Health confirmed the 2nd case of [a] hantavirus [infection] in the Azuero region. The patient, who is from Bebedero de Tonosi in the Los Santos province, was admitted to

the emergency unit of the Cecilio Castillero Hospital in Chitre, and was transferred yesterday [18 Jan 2014] to the Santo Tomas Hospital in [Panama City] in order to receive better [medical] attention. The 62-year-old patient presented with a clinical picture similar to dengue and hantavirus [infections], but after tests were done, he was confirmed positive for hantavirus [infection]. (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable